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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,712	07/06/2000	Joan Llach-Pinsach	PHF 99,593	4917

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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BRIARCLIFF MANOR, NY 10510

EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/15/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/610,712

Applicant(s)

LLACH-PINSACH ET AL.

Examiner

Dave Czekaj

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 11 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 6-10 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On pages 7 and 8 the applicant argues that the claims recite features neither taught nor suggested by Ratakonda in view of Altunbasak et al. The applicant further argues that the features that Ratakonda in view of Altunbasak et al. lack are splitting the shots into sub-entities called micro-segments. While the applicant's points are understood, the examiner respectfully disagrees. See for example Ratakonda, figure 2 and column 4, lines 50-57. There Ratakonda discloses a method for splitting or separating the shots into microsegments or keyframes. Once the shot boundary is detected, each shot is divided or split into its corresponding keyframes. The keyframes are then selected and summarized. This process is continued until all the shots in the video sequence are completed. Ratakonda further states in column 6, lines 47-49 that each keyframe replaces a continuous set of frames. The union of these frames is the shot. Hence, the keyframes must be merged in order to obtain the original shots indicating that the shots had been split into keyframes. Therefore, the rejection has been maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratakonda (5956026) in view of Altunbasak et al. (6389168), (hereinafter referred to as "Altunbasak").

Regarding claims 1 and 9-10, Ratakonda discloses a method for hierarchical digital video summarization and browsing (Ratakonda: column 2, lines 13-16). This method comprises a means for "detecting shot boundaries within the digital video sequence" (Ratakonda: column 2, lines 18-19, and figure 2), "constructing a hierarchical structure of the processed video sequence" (Ratakonda: column 2, lines 30-32, and figure 2), and "splitting up the shots into microsegments" (Ratakonda: column 6, lines 46-49, wherein the microsegments are the keyframes). However, Ratakonda fails to show microsegments having a level of homogeneity computed on a motion histogram as disclosed. Altunbasak teaches that the identification of keyframes or microsegments can be done by using motion histograms (Altunbasak: column 10, lines 27-48). The motion histograms are used to compare similarities between frames. If the frames are similar, they are tagged as keyframes indicating a level of homogeneity between frames. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the identification of keyframes based on a motion histogram since Altunbasak shows that histograms are easily used in the step of detecting keyframes or microsegments within a video sequence.

Regarding claim 3, Altunbasak discloses the "partitioning step uses a criterion involving the level of homogeneity on the motion parameters of the camera used to generate the processed video sequence" (Altunbasak: column 10, lines 27-48, wherein the motion parameter is the zoom).

Regarding claim 6, note the examiners rejection for claim 1 and in addition Ratakonda discloses an "indexing step for adding labels to each element of the structure" (Ratakonda: column 5, lines 32-34, wherein the user labels or tags the frame numbers of interest).

Regarding claim 7, Ratakonda discloses a video indexing device" (Ratakonda: column 9, lines 14-15).

Regarding claim 8, note the examiners rejection for claims 1 and 6 and in addition, Altunbasak discloses "storing labels" and "performing on the basis of the stored labels image retrieval using one or more frames of the image to be retrieved" (Altunbasak: column 11, lines 24, wherein the labels are the quantitative attributes which are stored for each image, the image retrieval is the query search done by the user).

Allowable Subject Matter

3. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 2 and 11 are allowed.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 10, 2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600